

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte HIDEHIRO INOUE

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Appeal No. 1997-3857  
Application No. 08/220,286

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ON BRIEF

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Before KRASS, BARRETT, and GROSS, Administrative Patent Judges.  
GROSS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 8, which are all of the claims pending in this application.

Appellant's invention relates to a thermistor with a gap portion between the peripheral edge of the ohmic electrodes and the peripheral edge of the thermistor body, an insulating coating where the peripheral edge of the ohmic electrodes contacts the thermistor body at the gap portion but not at the peripheral edge of the thermistor body. Claim 1 is

Appeal No. 1997-3857  
Application No. 08/220,286

illustrative of the claimed invention, and it reads as follows:

1. A thermistor device comprising:

a thermistor element body;

an ohmic electrode provided on a major surface of said thermistor element body with its outer peripheral edge positioned within an outer peripheral edge of said thermistor element body, thereby defining a gap portion; and

an insulating coating formed at said gap portion at least where said outer peripheral edge of said ohmic electrode is in contact with said thermistor element body, said outer peripheral edge of said thermistor body being free of said insulating coating.

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Shikama et al. (Shikama)	5,210,516	May
11, 1993		

Claims 1 through 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Shikama.

Reference is made to the Examiner's Answer (Paper No. 19, mailed April 16, 1997) for the examiner's complete reasoning in support of the rejection, and to appellant's Brief (Paper No. 18, filed March 5, 1997) for appellant's arguments thereagainst.

OPINION

We have carefully considered the claims, the applied prior art reference, and the respective positions articulated by appellant and the examiner. As a consequence of our review, we will reverse the obviousness rejection of claims 1 through 8.

The examiner admits (Answer, pages 3-4) that Shikama has no portion free from the insulative coating other than where the electrodes are located. The examiner therefore asserts (Answer, page 4) that "to cover or not cover additional surfaces with the insulating material is a modification which only requires routine skill in the art," and that "it would have been obvious ... to provide the coating of Shikama et al. on all portions of the body except for the outer peripheral edge for the purpose of lowering the manufacturing cost of the device." Further, the examiner states (Answer, page 5) that the proposed modification is not contrary to the express teachings of the reference because "one of ordinary skill in the art would realize that in order to reduce cost, a compromise to one advantage may be necessary in order to achieve a desired result while other advantages are maintained."

Appeal No. 1997-3857  
Application No. 08/220,286

The examiner is required to provide a reason from some teaching, suggestion or implication in the prior art as a whole, why one having ordinary skill in the pertinent art would have been led to modify Shikama to arrive at the claimed invention. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The examiner's motivation for modifying Shikama in the particular manner necessary to arrive at appellant's claimed invention comes directly from appellant's specification (page 3, lines 3-6) and not from any teaching or suggestion in the prior art. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." Para-Ordnance Mfg., Inc. v. SGS Importers Int'l, Inc., 73 F.3d 1085, 37 USPQ2d 1237, 1241 (Fed. Cir. 1995), citing W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983).

In addition, "a proposed modification [is] inappropriate for an obviousness inquiry when the modification render[s] the prior art reference inoperable for its intended purpose. In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)." In re Fritch, 972 F.2d 1260, 1265-1266 n.12, 23 USPQ2d 1780, 1783 n.12 (Fed. Cir. 1992). Shikama states (column 2, lines 9-19) that the objects of the invention include providing a thermistor which is protected from both external force which cause cracks and chips of the substrates (column 1, lines 41-46) and also gases which penetrate into the substrate (column 1, lines 50-54) and which has little heat leakage. Shikama repeatedly emphasizes that coating the entire thermistor with glass, except where the electrodes are located, in addition to preventing migration of silver ions, prevents heat leakage from the thermistor, gas introduction into the thermistor, cracking or chipping of the substrate, or peeling off of the underelectrode. Thus, eliminating a portion of the glass coating does not merely substitute one benefit for another, as suggested by the examiner, but rather is completely contrary to the express purpose of the reference, as argued by appellant (Brief, page 3). Therefore,

Appeal No. 1997-3857  
Application No. 08/220,286

we cannot sustain the obviousness rejection of the claims over  
Shikama.

CONCLUSION

The decision of the examiner rejecting claims 1 through 8  
under 35 U.S.C. § 103 is reversed.

REVERSED

ERROL A. KRASS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
LEE E. BARRETT	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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	)	
ANITA PELLMAN GROSS	)	
Administrative Patent Judge	)	

Appeal No. 1997-3857  
Application No. 08/220,286

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